

## Section 4-2: Angles of Triangles

By the end of this lesson, you should be able to answer:

- How do you apply the Triangle Angle-Sum Theorem?
- How do you apply the Exterior Angle Theorem?

Define the following:

1. Auxiliary Line

2. Exterior Angle

3. Remote Interior Angles

4. Flow Proof

Theorems:

4.1 - Triangle Angle-Sum Theorem

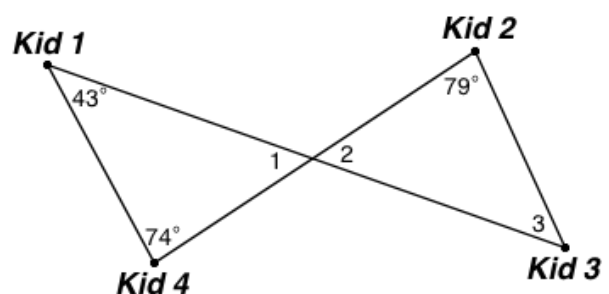
4.2 - Exterior Angle Theorem

Triangle Angle-Sum Corollaries:

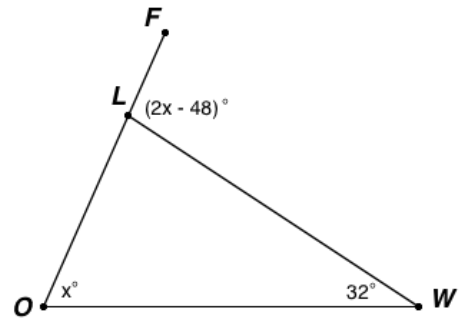
4.1 -

4.2 -

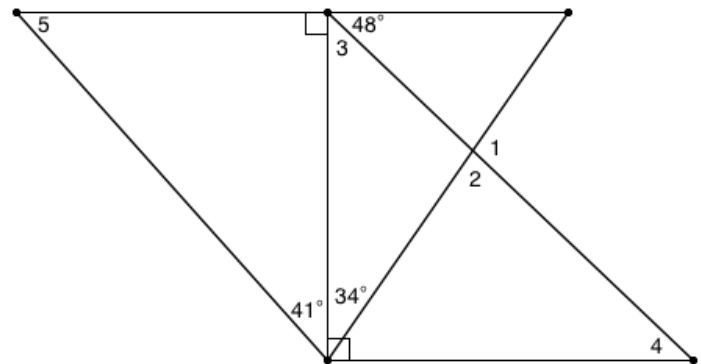
*Example 1:* The diagram at the right shows the paths a ball is thrown in a game played by kids. Find the measure of each numbered angle.



*Example 2:* Find the measure of  $\angle FLW$ .



*Example 3:* Find the measure of each numbered angle.



Problem Set:

"We rarely think people have good sense unless they agree with us." – Francois de La Rochefoucauld